

Diversity of Life (Life Science Unifying Concept D)

Evidence suggests that living things change over periods of time. These changes can be attributed to genetic and/or environmental influences. This process of change over time is called biological evolution. The diversity of life on Earth is classified using objective characteristics. Scientific classification uses a hierarchy of groups and subgroups based on similarities that reflect evolutionary relationships.

By the end of the grade band:		By the end of the grade band, students know and are able to do everything required in earlier grades and:		By the end of grade band, students know and are able to do everything required in earlier grades and:		By the end of grade band, students know and are able to do everything required in earlier grades and:		
Grades K - 2		Grades 3 - 5		Grades 6 - 8		Grades 9 - 12		
L.2.D	Students understand that there are many kinds of living things on Earth.	L.5.D	Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.	L.8.D	Students understand that life forms change over time, contributing to the variety of organisms found on the Earth.	L.12.D	Students understand biological evolution and diversity of life.	
L.2.D.1	Students know plants and animals can be sorted by observable characteristics and behaviors. E/S	L.5.D.1	Students know animals and plants can be classified according to their observable characteristics. E/S	L.8.D.1	Students know species can be identified and classified based upon their characteristics. (8.8.6) E/S	L.12.D.1	Students know organisms can be classified based on evolutionary relationships. E/S	Evolution
					L.12.D.2	Students know similarity of DNA sequences gives evidence of relationships between organisms. E/S		
L.2.D.2	Students know some plants and animals are extinct. E/S	L.5.D.2	Students know fossils are evidence of past life. E/S	L.8.D.2	Students know fossils provide evidence of how life and environmental conditions have changed throughout geologic time. E/S	L.12.D.3	Students know the fossil record gives evidence for natural selection and its evolutionary consequences. E/S	Natural Selection
						L.12.D.4	Students know the extinction of species can be a natural process. E/S	
		L.5.D.3	Students know differences among individuals within a species give them advantages and/or disadvantages in surviving and reproducing. E/S	L.8.D.3	Students know an organism's behavior is based on both experience and on the species' evolutionary history. E/S	L.12.D.5	Students know biological evolution explains diversity of life. E/S	
						L.12.D.6	Students know the concepts of natural and artificial selection. E/S	